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5        **INSTALLATION OF INTELLIGENT SENSORS FOR THE HIGH-SPEED  
         ACQUISITION OF DATA VIA AN ETHERNET NETWORK**

**ABSTRACT**

10        The invention concerns an installation for the high-speed  
acquisition of acquisition data via an Ethernet network **(2)**  
with several nodes **(N)**, where at least one of the nodes of the  
Ethernet network constitutes a client/server detection unit  
**(3)** with at least one detector **(4)** delivering acquisition  
data.

15        According to the invention each detection unit **(3)**  
includes :

- self-triggering resources for reading the acquisition data  
so that the said detection unit **(3)** is able to operate  
independently,
- 20    - reading and processing resources that are independent of the  
other nodes,
- resources for transmission of the acquisition data via the  
network **(2)**, to at least one other node **(N)**.
- and a clock unit allowing correlation between the clocks of  
25    the detection units, where each clock unit has resources for  
receiving a clock synchronisation signal, resources for  
transmission to the transmitting clock unit, and resources  
for processing the encoded instructions.

30        (Figure to be published: **figure 1**)